

USGS EROS Emergency Operations Project Response to Mississippi Valley Flooding

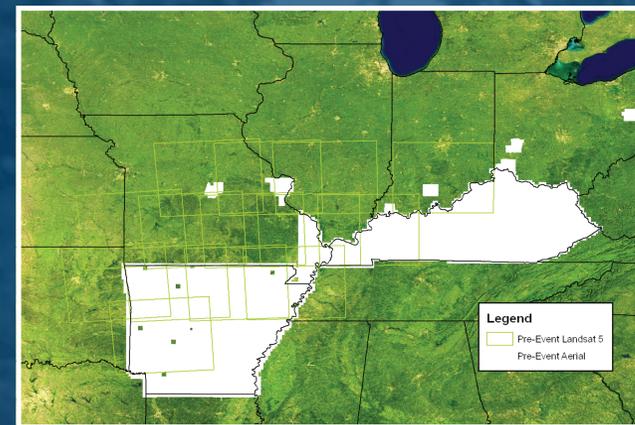
W. Miller¹, W. McElroy², G. R. Mah², R. Risty², R. Longhenry², and C. Gacke²

¹U.S. Geological Survey (USGS) Earth Resources Observation and Science (EROS) Center. ²SAIC, contractor to the USGS EROS Center. Work performed under USGS contract 03CRCN0001.

The U.S. Geological Survey (USGS) Earth Resources Observation and Science (EROS) Center Emergency Operations (EO) Project is responding to ongoing flooding in the greater Mississippi Valley region of the central United States. On March 18, 2008, a series of late-winter storms in the central United States caused extensive flooding from Illinois through Arkansas. Subsequent storms have increased the number of affected counties in Arkansas, Illinois, Indiana, Missouri, and Ohio. The full impact of the flooding is yet to be determined because this

disaster is ongoing. The EO Project received data requests from a number of the affected states for pre-event/baseline data coverage and for post-event data acquisitions. New image data acquisitions have been provided by the USGS, International "Charter Space and Major Disasters", U.S. AirForce EagleVision, and the National Geospatial-Intelligence Agency (NGA). As of March 27, 2008, the EO Project has made over three TB of data available for FTP download at <http://hdds.usgs.gov> and via web map service (WMS) at <http://iq.usgs.gov>.

Pre-Event/Baseline Data



Public Access Data

Aerial Photography

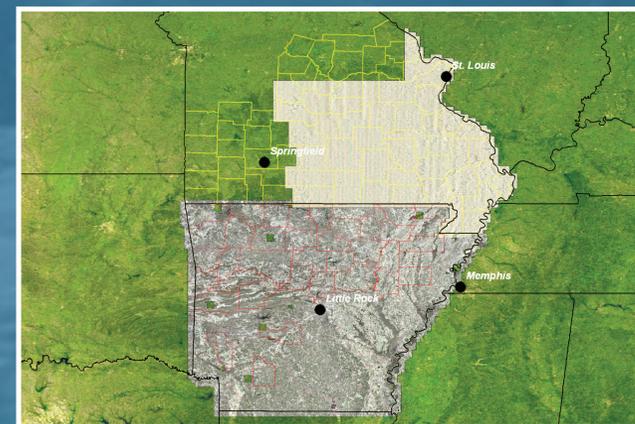
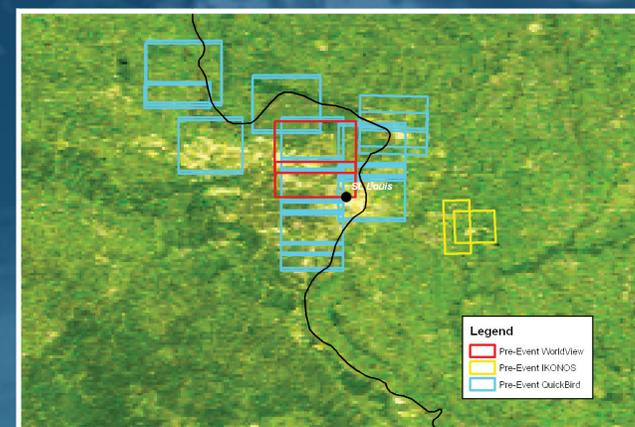
- Arkansas Digital Ortho 1 m 2006 (State of Arkansas)
- Cincinnati, OH 1 ft 2004
- Dayton, OH 2 ft 2000
- Eastern Missouri 2 ft 2007
- Jefferson, MO 6 in 2006
- Jefferson, MO 1 ft 2006
- Kentucky NAIP 1 m 2004 (USDA)
- Orange County, IN 1 ft 2005
- St. Louis, MO 1 ft 2006
- Vanderburgh County, IN 6 in 2005

Satellite Data

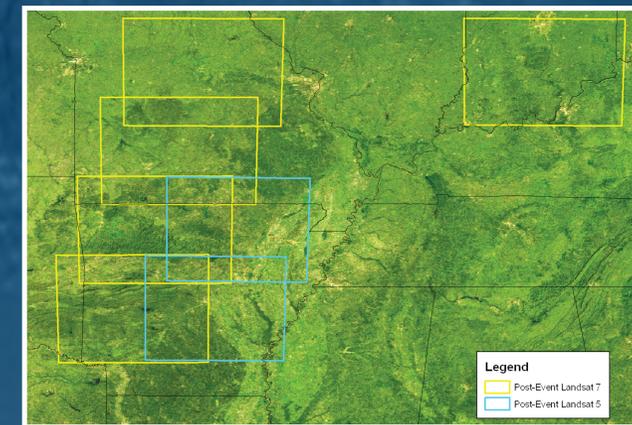
- Landsat 5 (USGS via International Charter) 14 scenes
- NLCD Land Cover

Restricted Access Data

- ALOS (JAXA via International Charter) 4 scenes
- IKONOS (NGA) 17 scenes
- QUICKBIRD (NGA) 42 scenes
- RADARSAT (CSA via International Charter) 3 scenes
- WORLDVIEW (NGA) 6 scenes

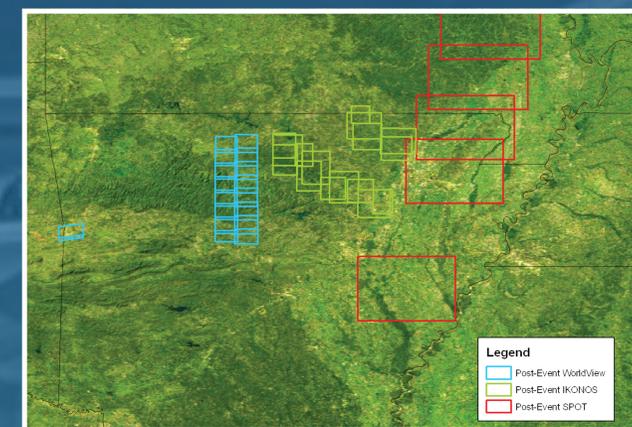


Post-Event Data



Post-Event Data

- Public Access Data
- ASTER (NASA) 2 scenes
- Flood Estimates (NGA)
- Landsat 7 (USGS via International Charter) 5 scenes
- Landsat 5 (USGS via International Charter) 2 scenes
- MODIS (NASA/U.S. Forest Service) 12 mosaics
- MODIS Change Pairs (USGS eMODIS Team)
- U.S. Army Corps of Engineers One foot aerial – Black and White Rivers, Arkansas



Restricted Access Data

- ALOS (JAXA via International Charter) 2 scenes
- ENVISAT (ESA via International Charter) 36 scenes
- IKONOS (NGA) 16 scenes
- RADARSAT (CSA via International Charter) 2 scenes
- SPOT-5 (USAF/EagleVision) 5 scenes
- WORLDVIEW (NGA) 16 scenes

